

WHAT IS CLAIMED IS:

1. A vector for producing a polypeptide heterologous to prokaryotic cells comprising (1) anti-termination nucleic acid that inhibits intragenic transcription termination with a non-lambda promoter therefor, and (2) RNA encoding the polypeptide with a non-lambda promoter therefor, wherein an RNA recognition site for binding anti-termination protein produced from the nucleic acid is located 5' of the RNA encoding the polypeptide.
2. The vector of claim 1 further comprising nucleic acid encoding a GreA or GreB protein with a promoter therefor.
3. The vector of claim 1 wherein the prokaryotic cells are bacterial cells.
4. The vector of claim 1 wherein the polypeptide is a mammalian polypeptide.
5. The vector of claim 1 wherein the non-lambda promoter is a *trp* or alkaline phosphatase promoter or both.
6. A process for producing a heterologous polypeptide in prokaryotic host cells comprising:
  - (a) culturing the host cells, which comprise (1) anti-termination nucleic acid that inhibits intragenic transcription termination with a non-lambda promoter therefor, and (2) RNA encoding the polypeptide with a non-lambda promoter therefor, wherein an RNA recognition site for binding anti-termination protein produced from the nucleic acid is located 5' of the RNA encoding the polypeptide, and wherein the anti-termination nucleic acid is expressed at the time of expression of the RNA; and
  - (b) recovering the heterologous polypeptide from the cells or from cell culture medium.
7. The process of claim 6 wherein the heterologous polypeptide is a eukaryotic polypeptide.
8. The process of claim 7 wherein the heterologous polypeptide is a mammalian polypeptide.
9. The process of claim 8 wherein the mammalian polypeptide is a human polypeptide.
10. The process of claim 9 wherein the human polypeptide is thrombopoietin (TPO) or fibroblast growth factor-5 (FGF-5).
11. The process of claim 6 wherein the non-lambda promoter is a *trp* or alkaline phosphatase promoter or both.

12. The process of claim 6 wherein the RNA and anti-termination nucleic acid comprise a polycistronic genetic unit comprising a first cistron encoding the heterologous polypeptide and a second cistron downstream from the first cistron that is the anti-termination nucleic acid with a single promoter that controls transcription of said polycistronic genetic unit.
13. The process of claim 6 wherein the RNA and anti-termination nucleic acid are expressed under separate promoters.
14. The process of claim 6 wherein the prokaryotic cells are bacterial cells.
15. The process of claim 6 wherein the polypeptide is recovered from the cytoplasm or periplasm of the cells.
16. The process of claim 6 wherein the polypeptide is recovered from the cell culture medium.
17. The process of claim 6 wherein the anti-termination nucleic acid is a bacteriophage N or Q gene.
18. The process of claim 17 wherein the anti-termination nucleic acid is a lambda N gene.
19. The process of claim 18 wherein the RNA recognition site is a nut site.
20. The process of claim 19 wherein the nut site is lambda nutL, nutR, Box B, mutant nut, or nut from a lambdoid phage other than lambda phage.
21. The process of claim 6 wherein the host cells further comprise nucleic acid encoding a GreA or GreB protein with a promoter therefor.
22. The process of claim 21 wherein nucleic acid encoding GreB is expressed.
23. A vector comprising nucleic acid encoding GreA or GreB protein, nucleic acid encoding a polypeptide heterologous to prokaryotic cells, and one or more promoters for the nucleic acids.
24. The vector of claim 23 wherein the nucleic acid encodes GreB.
25. The vector of claim 23 wherein the prokaryotic cells are bacterial cells.
26. The vector of claim 23 wherein the polypeptide is a mammalian polypeptide.
27. A process for producing a heterologous polypeptide in prokaryotic host cells comprising:

- (a) culturing the host cells, which comprise nucleic acid encoding GreA or GreB protein, nucleic acid encoding the heterologous polypeptide, and one or more promoters for the nucleic acids; and  
(b) recovering the heterologous polypeptide from the cells or from cell culture medium.

28. The process of claim 27 wherein nucleic acid encoding GreB protein is expressed.
29. The process of claim 27 wherein the cells are bacterial cells.
30. The process of claim 27 wherein the heterologous polypeptide is a mammalian polypeptide.
31. The process of claim 27 wherein the mammalian polypeptide is a human polypeptide.
32. The process of claim 31 wherein the human polypeptide is thrombopoietin (TPO) or fibroblast growth factor-5 (FGF-5).
33. The process of claim 27 wherein the promoter is a *trp* or alkaline phosphatase promoter or both.
34. The process of claim 27 wherein the polypeptide is recovered from the cytoplasm or periplasm of the cells.
35. The process of claim 27 wherein the polypeptide is recovered from the cell culture medium.